EACH CELL IS COMMONLY 32 BITS

- 8 BITS FOR RED
- 8 BITS FOR GREEN
- 8 BITS FOR BLUE
- 8 CONTROL BITS (read ONLY / READ-WRITE) etc.

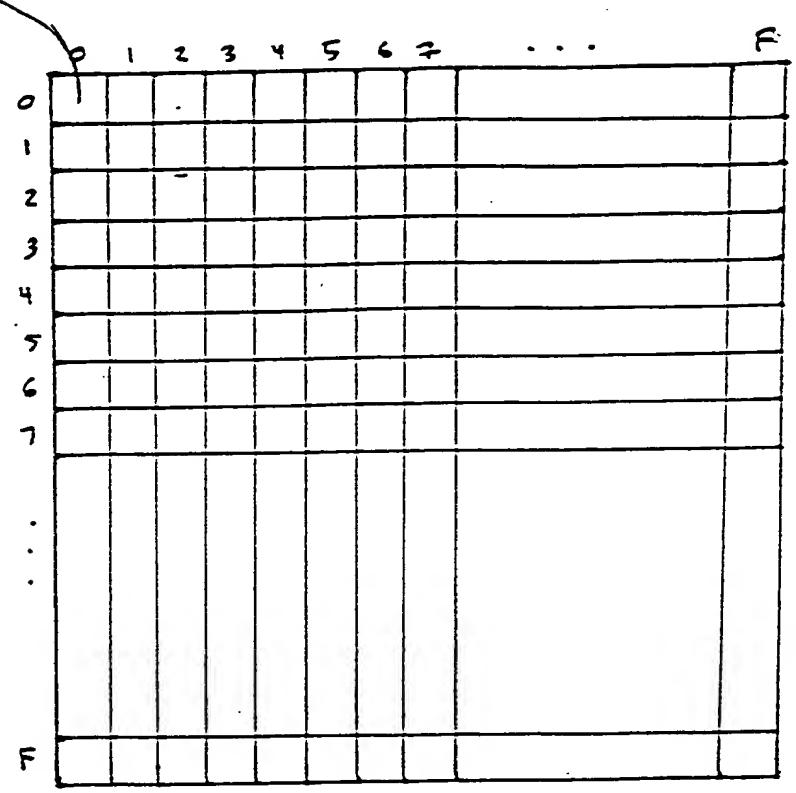

FIG. 1

0054940

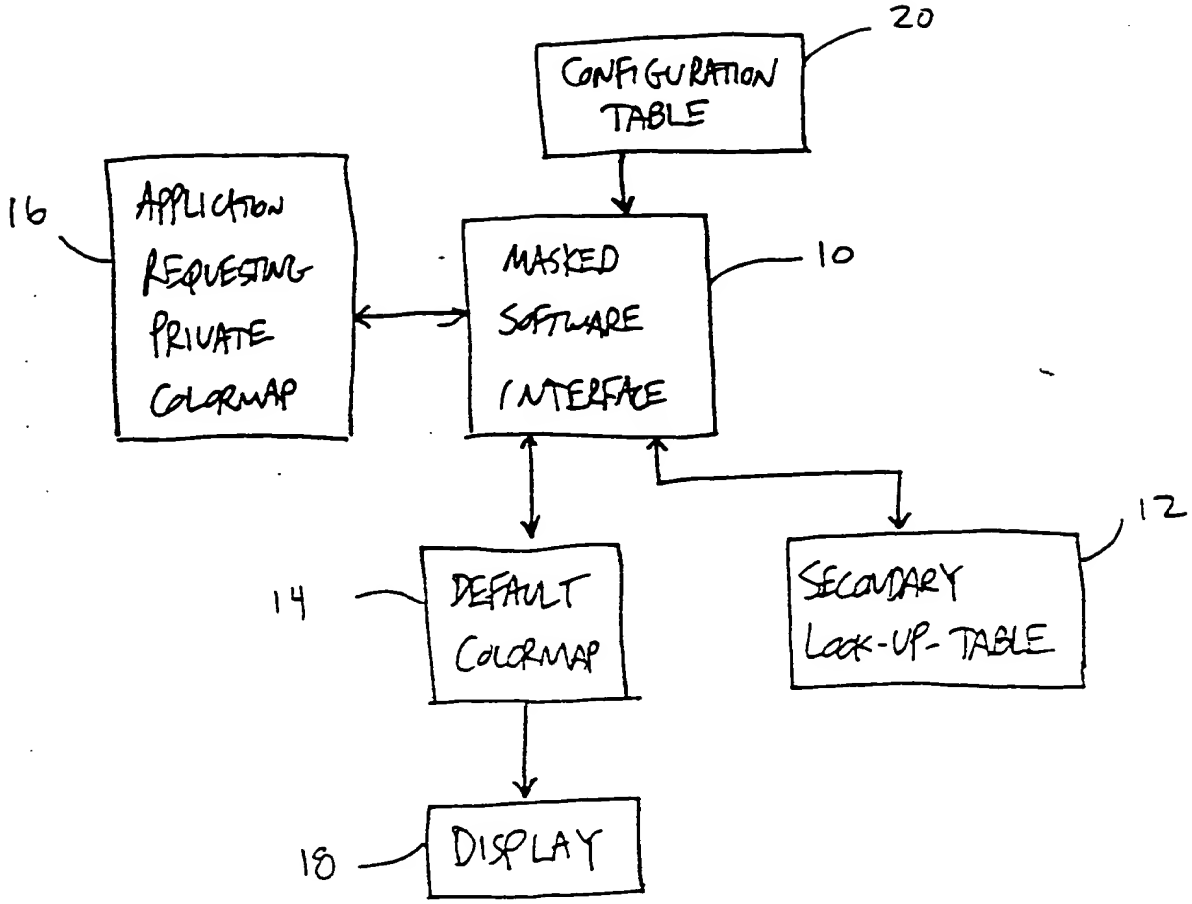

FIG. 2

0074080 : 6/6/95

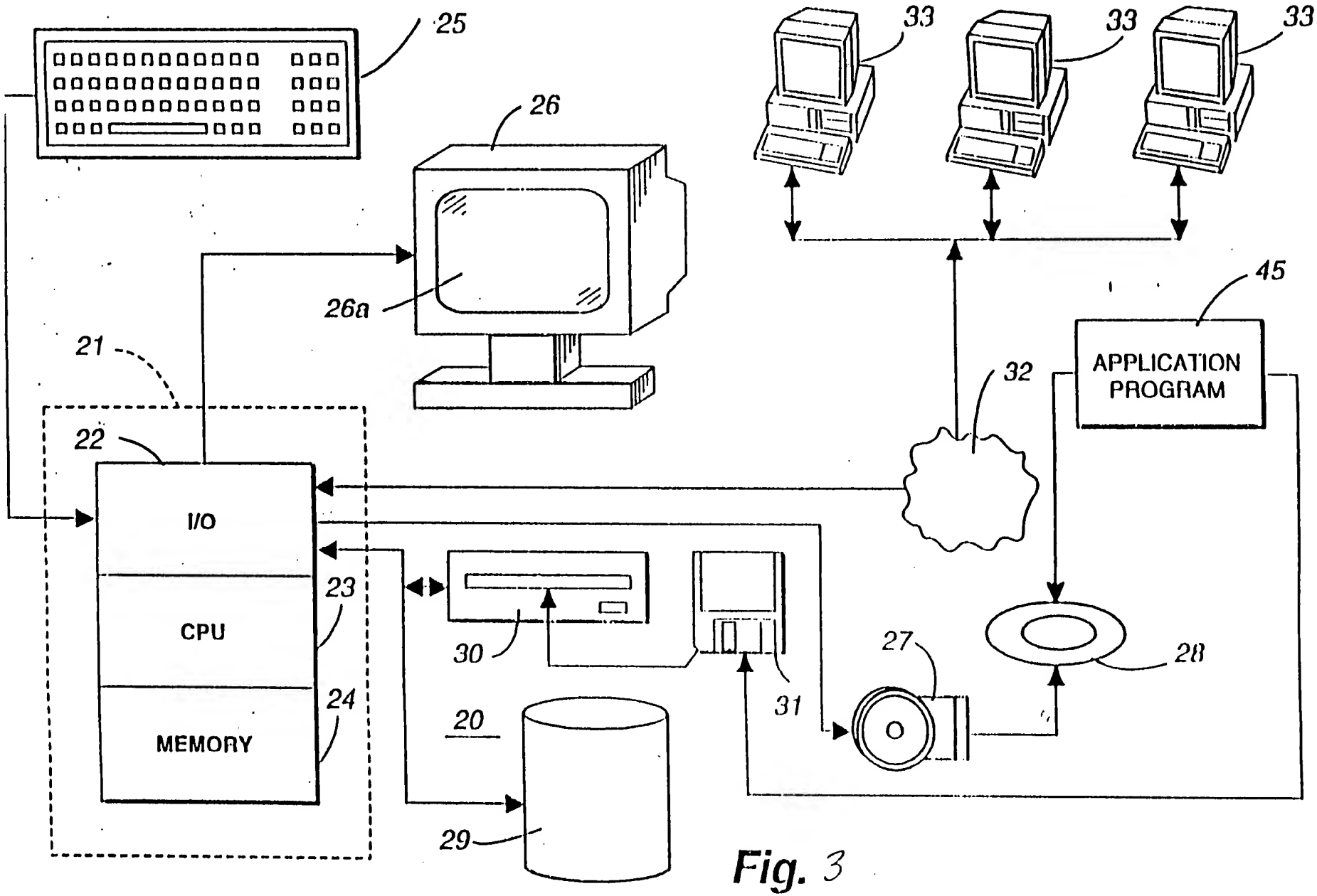
25
26
26a
33
33
33
45
APPLICATION PROGRAM
32
21
22
I/O
CPU
MEMORY
23
24
30
31
27
28
20
29

Fig. 3

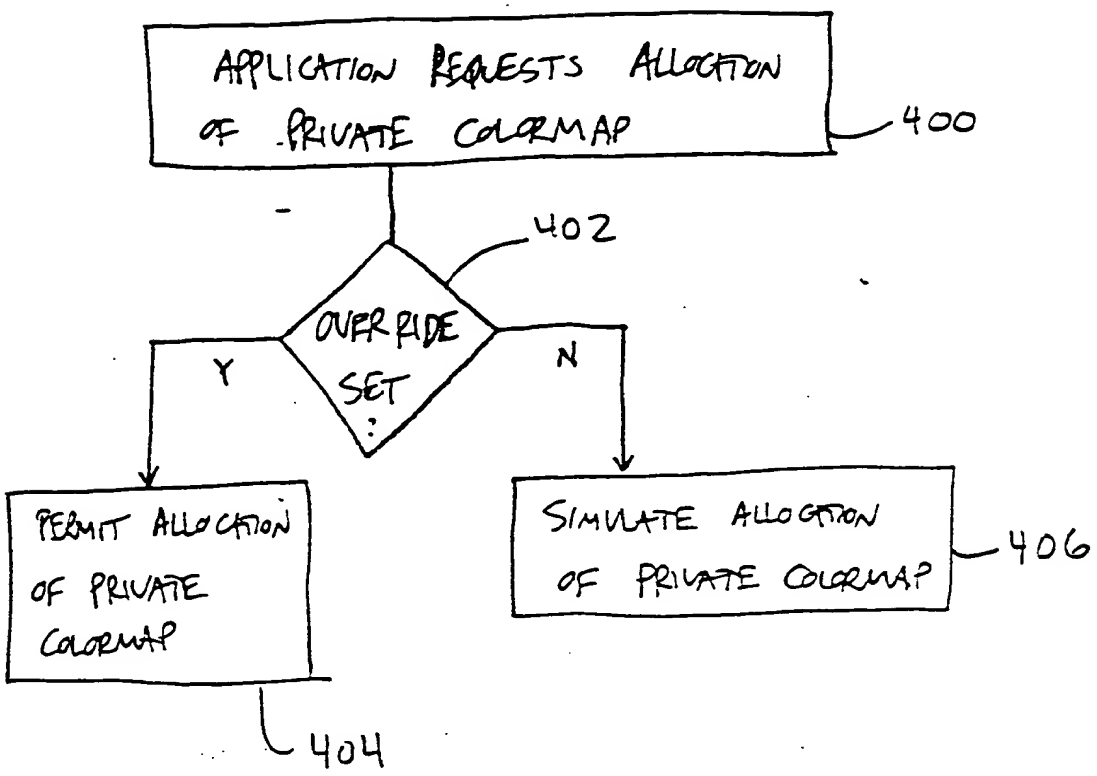

Fig. 4A

DOCKET NO: SUN-P3559

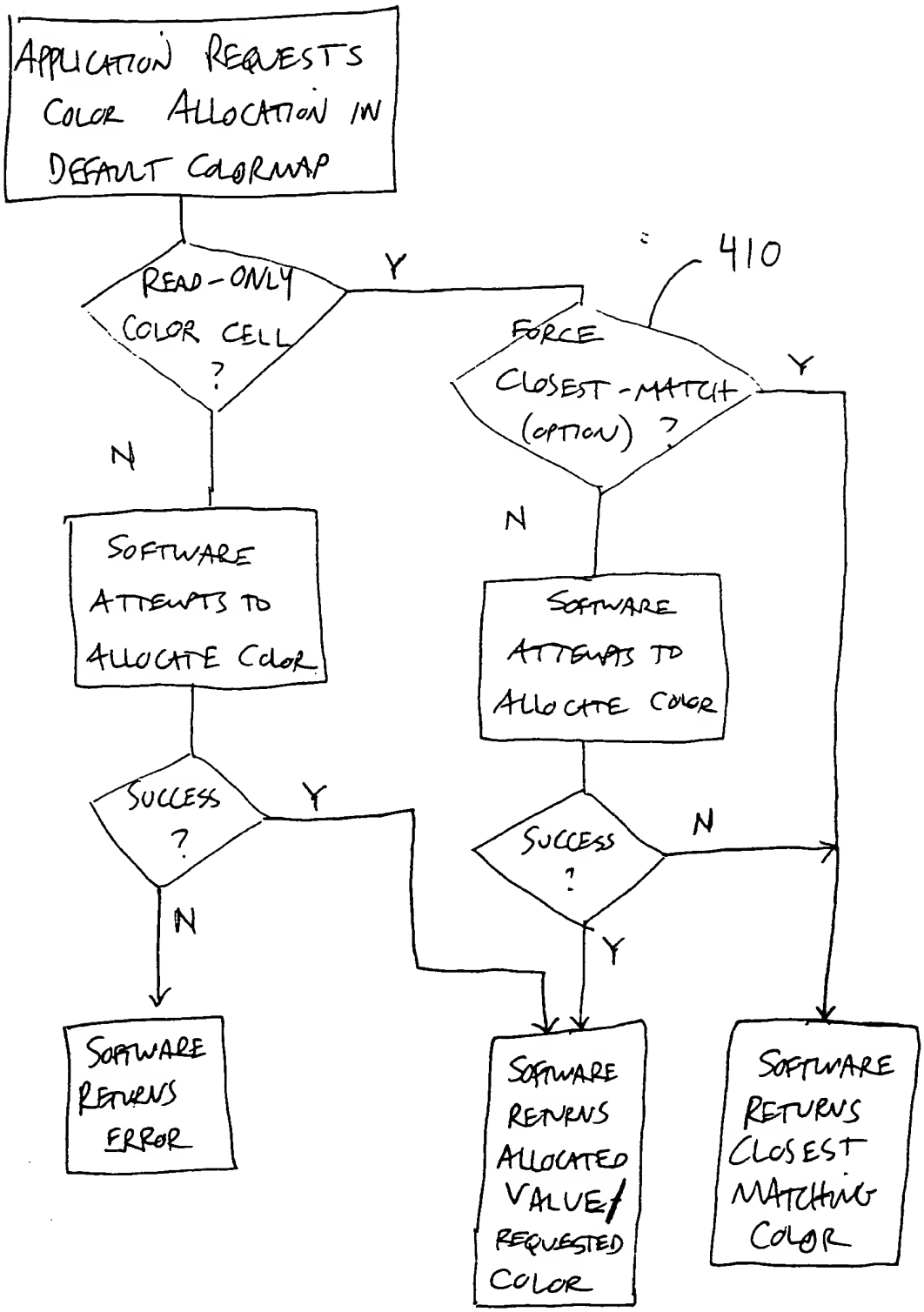

Fig. 4B

Docket: 9-95-050

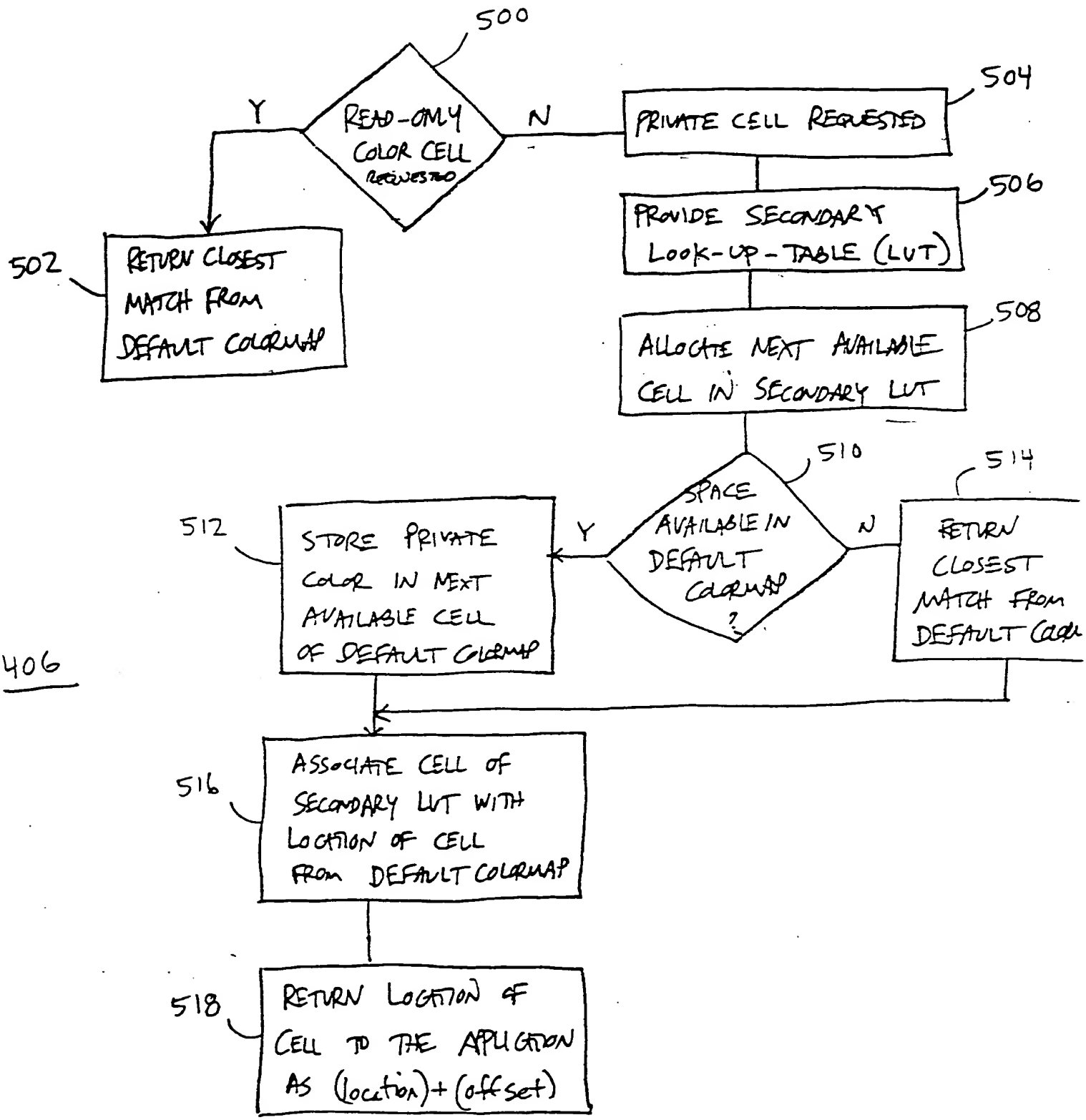
500
READ-ONLY COLOR CELL REQUESTED
Y
N
502
RETURN CLOSEST MATCH FROM DEFAULT COLORMAP
504
PRIVATE CELL REQUESTED
506
PROVIDE SECONDARY LOOK-UP-TABLE (LUT)
508
ALLOCATE NEXT AVAILABLE CELL IN SECONDARY LUT
510
SPACE AVAILABLE IN DEFAULT COLORMAP ?
512
STORE PRIVATE COLOR IN NEXT AVAILABLE CELL OF DEFAULT COLORMAP
514
RETURN CLOSEST MATCH FROM DEFAULT COLOR
406
516
ASSOCIATE CELL OF SECONDARY LUT WITH LOCATION OF CELL FROM DEFAULT COLORMAP
518
RETURN LOCATION OF CELL TO THE APPLICATION AS (location)+(offset)

FIG. 5.

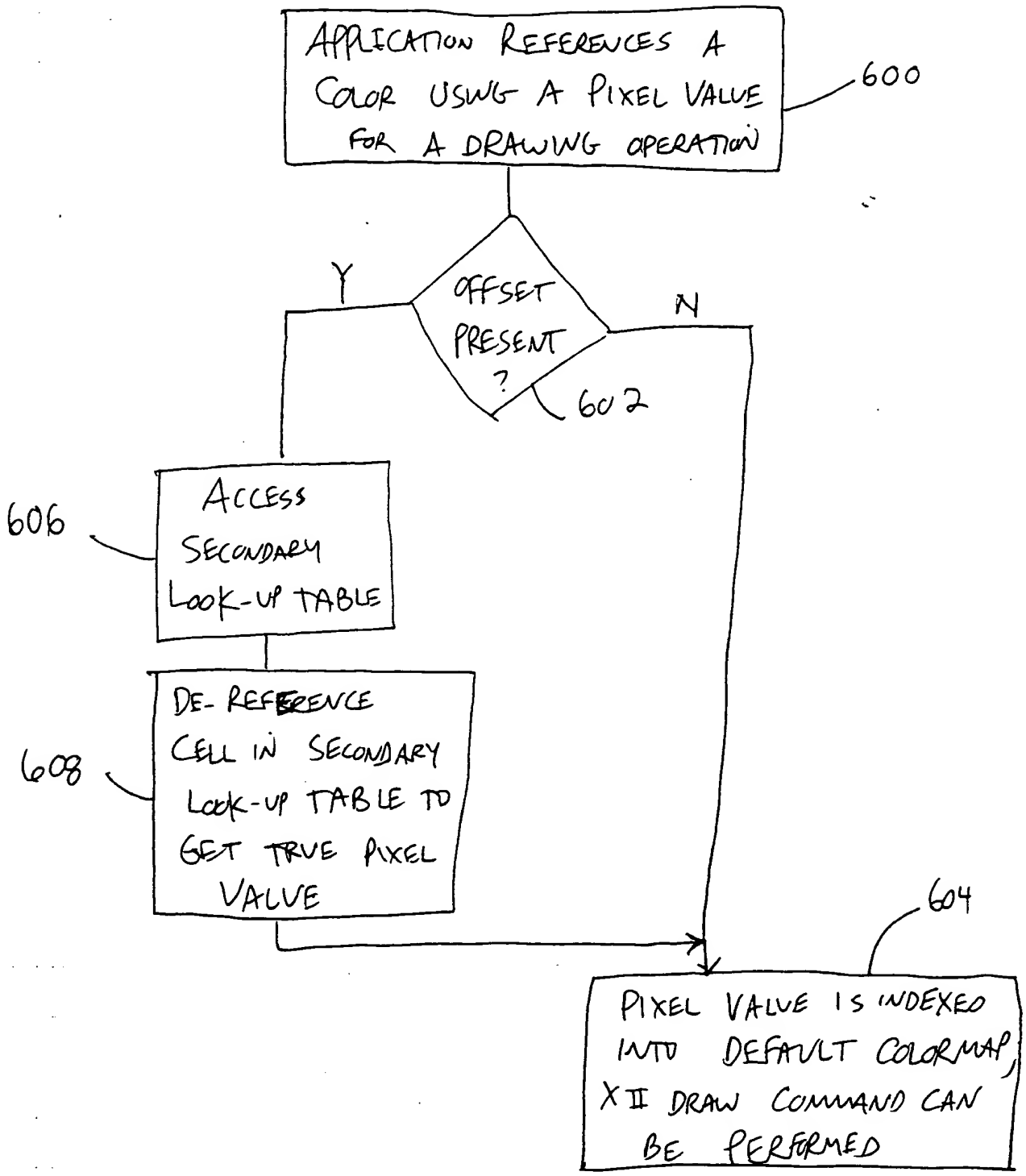
APPLICATION REFERENCES A COLOR USING A PIXEL VALUE FOR A DRAWING OPERATION
600
OFFSET PRESENT ?
602
Y
N
ACCESS SECONDARY LOOK-UP TABLE
606
DE-REFERENCE CELL IN SECONDARY LOOK-UP TABLE TO GET TRUE PIXEL VALUE
608
PIXEL VALUE IS INDEXED INTO DEFAULT COLORMAP, XII DRAW COMMAND CAN BE PERFORMED
604

FIG. 6A

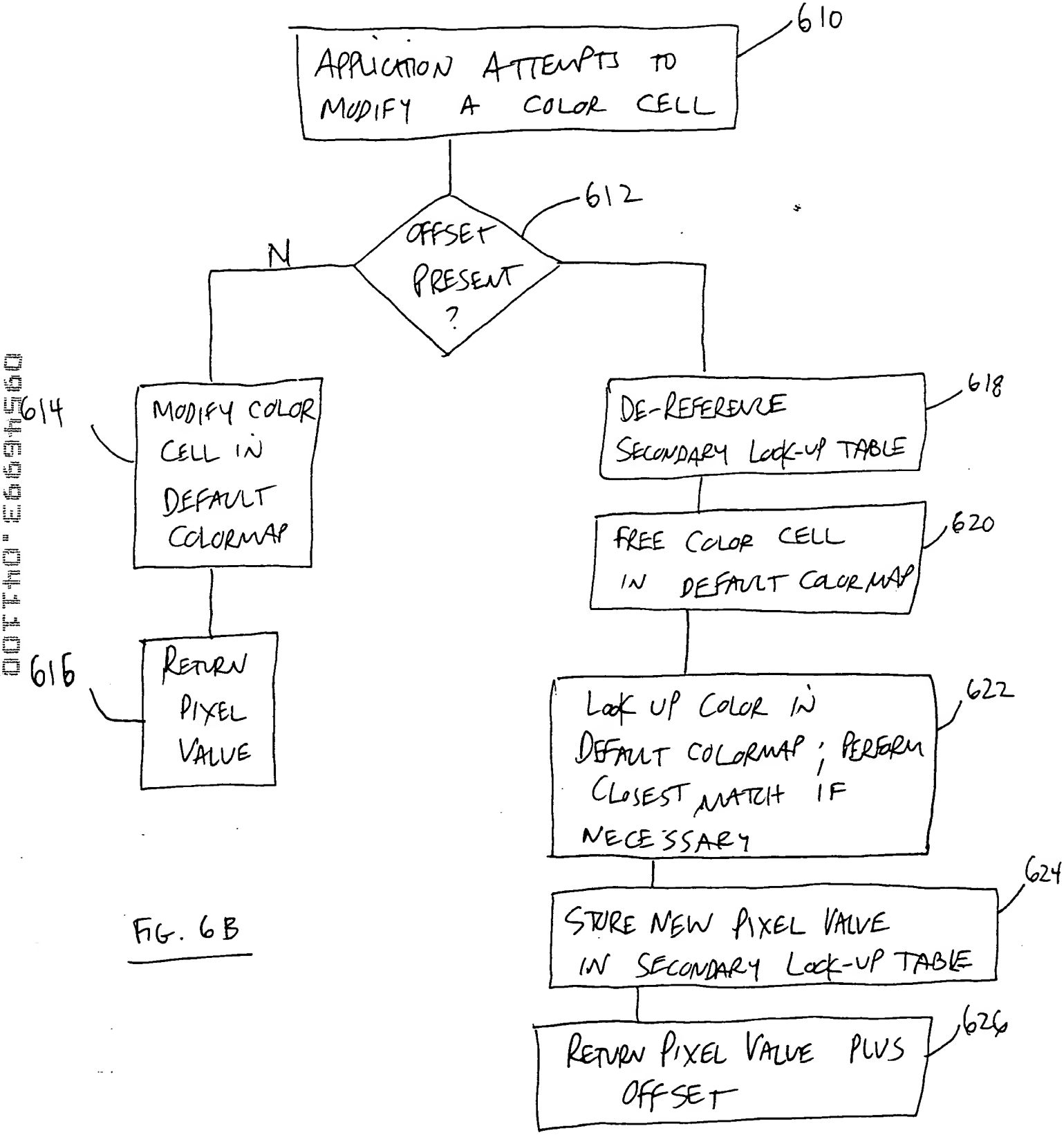
APPLICATION ATTEMPTS TO MODIFY A COLOR CELL
610
OFFSET PRESENT ?
612
N
MODIFY COLOR CELL IN DEFAULT COLORMAP
614
RETURN PIXEL VALUE
616
DE-REFERENCE SECONDARY LOOK-UP TABLE
618
FREE COLOR CELL IN DEFAULT COLORMAP
620
LOOK UP COLOR IN DEFAULT COLORMAP; PERFORM CLOSEST MATCH IF NECESSARY
622
STORE NEW PIXEL VALUE IN SECONDARY LOOK-UP TABLE
624
RETURN PIXEL VALUE PLUS OFFSET
626

FIG. 6B

0071470 "2595 0495 0

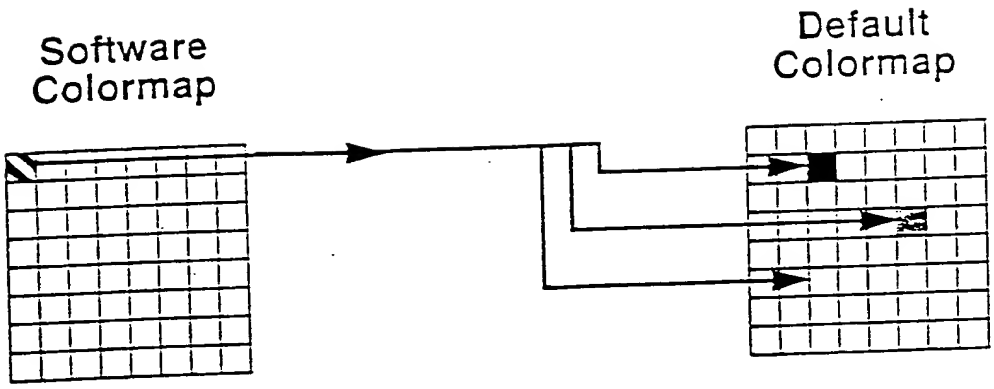

Fig. 7